Single Electricity Market

(SEM)

SEM Tariffs and Charges to apply from 1 October 2024 – 30 September 2025

Decision Paper

SEM-24-056

30 August 2024

EXECUTIVE SUMMARY

As required under Trading and Settlement Code Part B, a number of market parameters require approval by the SEM Committee each year. This document includes the SEM Committee decisions for the following four Tariffs/Charges and one Conversion Rate:

- Supplier Capacity Charge Price
- Difference Payment Socialisation Multiplier
- Residual Error Volume Price
- Currency Cost Price and Currency Adjustment Charge Factor
- Annual Capacity Charge Exchange Rate

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1. Introduction

This paper provides a short description and review of the Single Electricity Market Operator (SEMO), submissions in relation to the following:

- Supplier Capacity Charge Price
- Difference Payment Socialisation Multiplier
- Residual Error Volume Price
- Currency Cost Price and Currency Adjustment Charge Factor
- Annual Capacity Charge Exchange Rate

The above market parameters are required to enable the Market Operator (MO) to calculate and issue Credit Cover Requirements to participants. Participants are then required to ensure that adequate Credit Cover is in place before 1 October 2024.

This paper also sets out the final values approved by the SEM Committee (SEMC) for each of the above items for the Tariff Year 1 October 2024 until 30 September 2025.

2. Supplier Capacity Charge Price

The Capacity Remuneration Mechanism (CRM) awards capacity determined via an auction process. Payment under the CRM is funded through a Capacity Charge that is socialised across all suppliers on a monthly basis, based on their daytime demand profile.

The MO submitted a proposal for this tariff on 30 June 2024. The RAs reviewed this submission for consistency, analysing the results of three Capacity Auctions, alongside Multi-year Reliability Options for the Capacity Year in question to arrive at a total capacity amount. An under-recovery Y-2 K-factor was then added.

At the request of the Regulatory Authorities and following engagement, the overall capacity pot was reduced to remove payments associated with providers who, based on the latest available information in August 2024 will not or are very unlikely to reach substantial completion within the capacity year. On 19 August 2024, the MO submitted

a revised submission to account for the above and referred to F.19.1.5 in the Trading and Settlement Code.

Thus, while the current capacity pot is based on the best available information at this time, should the tariff not provide adequate recovery of costs then a further report may be provided to correct for this.

Table 1 outlines the Supplier Capacity Charge for Capacity Year 2024/25 below:

Metric	Value (€)
Total (Annual) Capacity Amount for 2024/25	580,700,326
Y-2 K-Factor under recovery	22,116,189
Total	**602,816,515**

Table 1: Amounts included in Supplier Capacity Charge for Capacity Year 2024/25

The increase in the capacity pot for 24/25 (€580.7m before the K-Factor) relative to 23/24 is due to several factors. The average cost (€/MW) in the 24/25 T-1 Capacity Auction was higher than the average cost (€/MW) in the 23/24 T-1 Capacity Auction. Also, there are several new projects that were awarded multi-year contracts in the 23/24 Capacity Auctions and as such the cost of the multi-year capacity, as well as the cost of the MW procured in the 24/25 Capacity Auctions, are both reflected in the 24/25 capacity pot.

The SEMC approve the MO proposed Supplier Capacity Charge Price tariff of €21.23/MWh.

3. Difference Payment Socialisation Multiplier

The Difference Payment Socialisation Multiplier relates to the Capacity Market. The purpose of building up the fund through a tariff is to ensure suppliers are fully hedged against high price events in cases in which there is not enough contracted capacity to cover sufficient difference payments for the pricing event. This is separate to the Supplier Capacity Charge itself.

If inadequate funds have been built up at a point where difference payments need to be drawn from the fund, the Market Operator may use the over recovery of other

charges to cover difference payments. Otherwise the Market Operator has the right to "suspend and accrue" until funds are sufficiently built up again.

SEMO submitted a proposal for this multiplier on 19 August 2024,

The current best estimate of this fund by September 2024, as provided by SEMO, is €30.1m. SEMO have proposed to maintain the fund at €20m, returning the estimated excess of €10.1 m via a Difference Payment Socialisation Multiplier of -1.7% for the Tariff Year 2024/25.

The estimated Capacity Difference Socialisation Fund at the end of Tariff Year 2023/24 and the excess to be returned in 2024/245 is outlined in Table 2 below:

Estimate of Capacity Difference Socialisation Fund	**€**
Estimated value of fund in Tariff Year 2023/24	30,120,000
Estimated balance to return in Tariff Year 2024/25	(10,120,000)
Estimated Socialisation Fund Value at end of 2024/25 Tariff Year	**20,000,000**

Table 2: Estimate of Capacity Difference Socialisation Fund

SEMO propose to review the value of the fund again during the next tariff setting process in 2025/26.

The SEMC are content with the approach and methodology used in the submission and approve the multiplier of -1.7%.

4. Residual Error Volume Price

Residual Error Volume Price (REVP) relates to differences between actual and anticipated metered volumes, that can swing in both positive and negative directions.

The concept and principles applied to REVP in I-SEM are similar to those previously applied in the SEM. As part of the I-SEM design, participants wanted to reduce weekly billing volatility associated with REVP and requested the introduction of a tariff arrangement. Thus, the key difference in REVP between SEM and I-SEM is the

manner in which costs are recovered, where it has moved from a recovery in close to real time in SEM, to a tariff arrangement in I-SEM.

SEMO submitted a proposal for this Tariff on 30 June 2023.

In their submission, the MO noted how Residual Error Volume costs tend to be quite volatile in nature. As part of the I-SEM design, participants wanted to reduce weekly billing volatility associated with Residual Error Volume Cost and requested the introduction of a tariff arrangement. Thus, the key difference in the recovery of Residual Error Volume Costs between SEM and I-SEM is the manner in which the cost is recovered, where it moved from a recovery close to real time in SEM to a tariff arrangement in I-SEM.

As stated above the residual error is affected by meter estimates and in particular where there is a significant difference between the metered volumes at initial, M+4 and M+13 resettlement. The impact of the difference between initial and resettlement led to a change in the method of calculating the K factor which was included in the 2023/24 tariff calculations. However this year, based on a review of the final volumes and the reduction in the impact of the difference between initial and resettlement, the K factor calculations will return to the original basis for the 2024/25 tariff years onwards.

Residual Error Volume Price relates to meter differences (difference between Loss-Adjusted Metered Generation Supplied and Loss Adjusted Metered Demand). Table 3 below details the final resettled meter differences for the first four years of I-SEM, as provided by the MO. To predict the volumes for 2024/25, the average of the 4 years was deemed the best estimate given the negative value for 2021/22

Tariff Year	Loss Adjusted Meter Differences
2018/19	414,100
2019/20	121,508
2020/21	97,755
2021/22	-185,084
Average	112,070

Table 3: Final Resettled Meter Differences

In their submission, the MO acknowledged prices in the I-SEM market have varied considerably since the start of I-SEM. An average of the prices for the 12 months from 1 June 2023 to 31 May 2024 has been deemed a reasonable estimate of price for 2024/25 on the basis that it covers the impact of winter and summer. This price is €103.59 per MWhr.

Using the average price as proposed by the MO results in a residual error volume cost of €11,609,331 for the 2024/25 Tariff Year, as shown in Table 7 below:

2024/25	Loss Adjusted Meter Differences - 4-year average	2024 Average Price € / MWh	€
4 year Average	112,070	103.59	11,609,331

In their submission, the MO outlined an All-Island SEM Demand forecast value of 38,800 GWh for Tariff Year 2024/2025. They also outlined the overall average annual Non-Interval Energy Proportion (NIEP) for calendar year 2023 in SEM at 56.17% (2022: 53%).

The Residual Error Volume Charge Price is calculated based on the estimate of the Residual Error Volume cost amount and taking into account the K factor arising from previous years, as applicable.

The K Factor process was amended for the 23/24 tariff due to a large imbalance in the financial figures resulting from the difference between initial and resettlement volumes. It was decided that only final resettled volumes gave a true view of the overall residual error value for a given year and an adjustment K factor was applied on this basis i.e. no K factor adjustment was applied in 23/24 for year 21/22.

The initial and resettlement differences have reduced in size and so the MO deemed it appropriate to return to the original K factor process based on the financial numbers for the 24/25 tariff onwards. To do this a K factor needs to be calculated on a financial basis for two financial years to catch up for the change in process for the 23/24 tariff calculations. The 2 years K factor that will be adjusted in the 24/25 tariff process are for the financial years 21/22 and 22/23.

As the Financial K-factor for 21/22 and 22/23, a c. €51.6m over recovery, is greater than the forecast Residual Error volume cost for 2024/25 of c. €11.6m, applying the over-recovery in the calculation of the Residual Error Volume Charge Price results in a negative tariff. Therefore, those SUs in the market who get charged the CREV at present, as they have a negative meter value (QMLF), will now receive funds from SEMO rather than payment to SEMO. The small number of SUs who get paid CREV as they have a positive meter value will now get charged CREV if the Residual error Volume Price is changed to a negative.

SEMO's submission, using the components as detailed above, proposes a Residual Error Volume Charge Price (PREVy) of 1.83 €/MWh for Tariff Year 2024/2025 as detailed in Table 7 below:

Tariff Year 24/25 – 1 October 2024 to end Sept. '25	**€**
Estimated Residual Error Volume cost 24/25 (€)	11,609,331
K Factor to return Actual over recovery 2 years to 2021/21 and 2022/23	(51,654,470)
Residual Error Volume cost 24/25 (€) including K Factors	(40,045,139)
Forecast NIEP demand (MWh)	21,793,960
Residual Error Volume Price (PREVy) €/MWh	**(€ 1.83)**

Table 7 - Proposed REVP for 2024/2025

The SEMC are content with the approach and methodology used and approve the proposed tariff of -1.83 €/MWh for Tariff Year 2024/2025.

5. Currency Cost Price and Currency Adjustment Cost Factor

As the Single Electricity Market operates via two currencies, variation can occur in incoming and outgoing amounts in the market over the year. This variation is covered through the Currency Adjustment Charge.

The concept and principles applied to currency costs in the old SEM are similar in the new market. However, the mechanism for the recovery of these costs in the Balancing and Capacity Markets has changed. As part of I-SEM design, a tariff arrangement was introduced which reduces weekly and monthly billing volatility associated with currency

as seen by suppliers. Therefore, recovery of costs have moved from close to real time in the old SEM to a tariff arrangement in I-SEM.

The MO submitted a proposal for this tariff on 19 August 2024 and the RAs have reviewed the submission.

The MO currently estimates the actual, 2023/24, Capacity and Balancing Market FX exposure against the business out-turning at a c. €0.7m under recovery, noting that FX rate movements are unpredictable, and any variation will be accounted for through a K Factor. There is an underlying assumption of a stable economic environment, whereby no economic shocks would give rise to significant FX rate fluctuations.

SEMO considered it reasonable to estimate the Currency Cost Amount (excluding any applicable K Factor) at €0.566 m for the 2024/25 Tariff Year. Their submission also outlined a 2022-2023 K Factor over recovery amount of €134,210, which needed to be considered within the 2024/25 tariff.

The SEMC approve the MO proposed tariff of €0.015/MWh for the Currency Cost Price and Currency Adjustment Charge Factor of 1.000 for the 2024/2025 Tariff Year.

6. Annual Capacity Charge Exchange Rate

The purpose of the Annual Capacity Charge Exchange Rate is to translate, where required, the Annual Capacity Charge from Euro (€) to Sterling (£) for billing purposes.

An Annual Capacity Payment Exchange Rate for Capacity Year 2024/2025 (which commences at 23:00 on 30 September 2024 and ends at 23:00 on 30 September 2025) was published recently within the T-1 2024/2025 Final Auction Information Pack (FAIP) in April 2024. The FAIP rate was fixed at €1 = £0.8681 following SEM Committee approval.

The MO noted in their tariff submission that it had considered using other exchange rates or a blended exchange rate for 2024/25 as there are other auctions relevant to

this period. However, as the T-1 auction for 2024/25 is the most recent auction they believe the exchange rate used in this auction is the most relevant to use.

Following that consideration, the MO has proposed the Annual Capacity Charge Exchange Rate is set equal to the Annual Capacity Payment Exchange Rate of €1 = £0.8681 as approved for the recent T-1 2024/2025 Capacity Auction, meaning that both Capacity Payments and Capacity Charges related to the T-1 Capacity Auction will be billed using the same exchange rate during the Capacity Year.

In addition, the MO believes that the application of the same rate will ensure that any currency gains/costs that may arise are not inadvertently recovered through Capacity Charges rather than through the Currency Adjustment Charge.

The SEMC approve the MO proposed tariff of €1 = £0.8681 for the Annual Capacity Charge Exchange Rate